

REMARKS

In the Office Action dated January 26, 2006, the Examiner rejected pending claims 1-19 under sections 112, 101 and 102. Each of those rejections is believed to have been overcome by this amendment and response.

In his para. 3-1, the Examiner rejected claim 17 under section 112 for being indefinite. The word “randomizing” in line 1 of the claim has been replaced by “selecting a single path” which has a definite antecedent basis in claim 14.

In his para. 5-1, the Examiner rejects claims 1-19 under section 101 for not being directed to subject matter resulting in a practical application producing a concrete, useful and tangible result. First, the Examiner cites the first subparagraph in claim 1 stating that the logic is flawed and that the possibility exists that the method could be immediately exited without tangible result. That first subparagraph has been amended to state that applicant’s method requires designation of one major cell for which to begin generating flow vector values. This language is supported by paragraphs 0022 and 0023 of the specification. Second, the Examiner points to claim 4 stating that it calls for “exiting the method” under conditions in which no concrete, useful and tangible result would occur. Independent claims 4 and 14 have both been amended to make them dependent on independent claim 1. Furthermore, they have been amended to clarify that they are subroutines operating within the larger structure of the method of claim 1 and that exiting those subroutines would result in further processing in accordance with the requirements of claim 1. Claim 1 itself has been amended to add language to the preamble specifying that the method is practiced together with a computer display (specification, para 038, pg. 29, line 25) and that upon completing the method a concrete, useful and tangible result is obtained in the form of display of one or more of a basin delineation, flowpath tracing, drainage area calculation, extents of hazardous waste spills and a streamline (specification, para 011, pg. 5 lines 14-16).

In his para. 7-1, the Examiner rejects claim 1 citing Garbrecht et al. as anticipating steps analogous to those of applicant where a single major cell is being fixed and problems being fixed are within that single major cell. However, claim 1 has been amended to

require that applicant's method be applied to cases involving multiple cells where problems (depressions, peaks and flat areas) extend across more than one major cell. This limitation differentiates applicant's method from that of Garbrecht. The Examiner further rejects claim 2 in para. 7-2 citing Garbrecht et al and claims 4-13 in para 8 and 8-1 citing Martz et al. Since claims 2 to 4, 8 to 14 and 17 to 19 are now all dependent on amended independent claim 1 which itself is applicable only to watersheds of more than one major cell, these bases of rejection have been overcome.

In the January 26 Office Action, the Examiner responded to Applicant's arguments in prior responses. Applicant further responds as follows:

Examiner's para 10-3 states that there is an absence of a concrete, useful and tangible result from use of applicant's method. As explained above, that rejection has now been overcome by amendment of claim 1 terminating in display of a variety of useful hydrologic and hydraulic data.

Examiner's para 10-4 is directed towards unfixable conditions. Mention of unfixable conditions in the claims has been eliminated by cancellation of claims 5-7, 15 and 16.

Examiner's paragraphs 10-5, 10-7 and 10-10 all base rejections on the possible applicability of Applicant's method to problems occurring in only one major cell, while the Examiner's paragraphs 10-8 and 10-9 both rely on Martz and Topaz as anticipatory of applicant's method (Examiner's para 8-1, last line) due to the previous preamble statement that applicant's method could be applicable to only one major cell. The amendment of claim 1 limiting its applicability to problems extending across more than one major cell overcomes these bases of rejection.

The remaining claims amendments are to correct minor English language preferences, clarify logic, make the phrase "flow vector value" consistent throughout the claims and eliminate references to the word "step" in the claims.

This response is submitted within two months after the three month response period. An extension fee of \$60 for a small entity for a one month extension has already been paid. Consequently, an additional one month extension of time to reply is requested, and an additional \$165 extension fee for a small entity accompanies this paper.

In view of the arguments presented above, the cancellation of claims 5-7, 15 and 16 and the amendments to independent claim 1 and dependent claims 2-4, 9-14, 17 and 19, it is respectfully suggested that all remaining claims are now in condition for allowance and it is respectfully requested that they be so allowed.

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